

REMARKS

The Examiner raises three points in response, in item 8, a first relating to support for claims 14 and 15, and two points relating to the disclosure of Irwin.

Claim rejection 35 USC §112

Concerning items 2, 3 and 8, relating to an alleged lack of support in the specification for claims 14 and 15, these claims read as follows:

14. A method as claimed in claim 2, wherein each of the frames comprises a plurality of time slots, the interface comprises a timing reference and wherein the pointers identify first time slots in the frames relative to the timing reference.

15. An arrangement as claimed in claim 9, wherein each of the frames comprises a plurality of time slots, the arrangement comprises a timing reference and the means for generating pointers is arranged to generate pointers identifying first time slots in the frames, relative to the timing reference.

The Examiner has not explained exactly which feature he considers lacks support, so all the features will now be discussed. There is support for the plurality of time slots in any mention of TDM of course, and they are shown in many of the figures, e.g. fig 6. There is support for a timing reference in any TDM system of course, and there is an example mentioned at page 8 line 21 which refers to "The phase offset to the node frame reference is indicated by a pointer".

There is support for the feature of pointers identifying first time slots at page 11 (not page 12 as was incorrectly stated in the previous response) lines 13 to 15, which state "Within each pointer byte the pointer value is transmitted in a 5 bit field and

indicates the number of the first time slot of the E1/T1 transmitted in the node 125 μ s frame."

For these reasons, these claims are fully supported.

Claim rejections 35 USC § 103

Concerning non-obviousness, in the last response, it was explained that the two independent claims 2 and 9 stand were distinguished over Won and Irwin and Caves. In particular, Irwin does not show the features of:

- a)"pointers identifying phase of the TDM traffic"
- b)"said pointers are mapped into one or more separate asynchronous cells for transport ahead of said traffic cells."

Advantages of the distinctive features of the invention: The significance of these distinctive features was explained as follows. Since the pointers indicate phase information rather than merely cell order as in Irwin, the TDM phase information can apply to more than one cell and so need not be sent with every cell. Hence sending it separately can mean less overhead. Furthermore the phase information can be sent as values with more bits and so have more precision without overflowing the header for example. Furthermore, it is not always necessary to send the information for every frame, so further overhead can be saved since it "facilitates the avoidance of the need for sending the pointer cells every 125 μ s frame if these are not required..." (page 13) thus avoiding sending the same information repeatedly.

Examiners response: The Examiner has responded in item 8 with two points relating to Irwin. A first point is that Irwin does show the header being separated from the payload. A second point is that the adaptation of cell headers into the header data stream of Irwin is an example of feature b). Neither of these points bring Irwin any closer to showing or suggesting the distinguishing features a) and b) or their advantages.

The first point is not traversed, indeed it was acknowledged in the previous response that Irwin shows separating the header from the payload, as the Examiner now states. However, the independent claims do not simply specify separation of headers containing pointers from their traffic. Mere separation of headers does not bring or suggest the advantages of the invention discussed above. The claims specify the pointers being in "separate asynchronous cells for transport ahead of said traffic cells". So the Examiner would need to show that the header stream of Irwin is "cells", that the cells are "asynchronous" that the cells are "for transport" and that they are for transport "ahead of said traffic cells", before Irwin becomes relevant to feature b).

The Examiner cites col 12 lines 65-67. This states as follows:

"The local high speed data stream is divided between two data streams at the output of the multiplexer 411, a payload data stream on a bus 413 and a header data stream on a bus 414."

This does indeed support the Examiner's assertion that the header is separated from the payload, but in Irwin the headers are separated to enable buffering and reordering of cells for onward transmission by a synchronous or an ATM link. The headers are reunited with their payload, if onward transmission is by ATM. If onward transmission is by synchronous TDM, then the destination and "order" information in the header is used in assembling the TDM frame for onward transmission. Therefore in Irwin there is no suggestion that the header stream or any other part of the received cells are put into "separate asynchronous cells" for transport.

In the Examiner's second point, he seems to try to argue that the header stream of Irwin is an example of pointers "mapped into one or more separate asynchronous cells for transport ahead of said traffic cells." As discussed above, the headers of Irwin must be either reunited with their payloads, or used to enable construction of synchronous TDM frames. Hence there cannot be disclosure of putting headers into separate asynchronous cells for transport ahead of their payload.

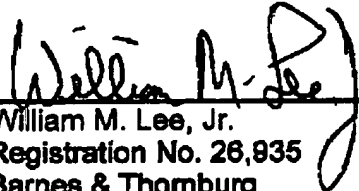
The Examiner appears to be assuming that the header datastream of Irwin is asynchronous. This is not disclosed, and there is no basis for making this assumption. Since it is described as a data stream and being on a bus, it is likely to be a synchronous data stream. The Examiner also seems to assume that the claim term "for transport ahead of the traffic cells" encompasses moving headers from an input to an output within the ATM switch, as shown by Irwin. There is no disclosure of the header being sent "ahead" of its payload, and such movement within a switch is not within the usual interpretation of the term "transport" applied to cells.

Concluding remarks: In conclusion, Irwin does not show feature b). It would be nonsensical technically to send the headers of Irwin in separate asynchronous cells ahead of their payload. Even if feature b) were shown, there is no advantage in sending headers, unless it is the "pointers identifying phase of the TDM traffic" which is sent ahead in separate asynchronous cells [features a) and b)]. There is no suggestion in any of the prior art of the advantages of this combination, nor how to achieve it. The Examiner states in item 5 the incentive or motivation would be to enable reconstruction of frames in TDM format after transmission. But this can be achieved without the invention, by keeping the phase information in each header. There is no suggestion of the advantages discussed above of the distinctive features of sending the phase information in separate asynchronous cells ahead of the traffic. Hence the claims are not obvious over the cited documents taken singly or in combination.

All the points raised by the Examiner have now been met and favorable reconsideration is requested. For the foregoing reasons, applicants respectfully submit that the claims in this application are in condition for allowance. Early issuance of a Notice of Allowance is solicited.

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